

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

AJU INTERNATIONAL LAW & PATENT GROUP

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WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing
(day/month/year) 12 JULY 2005 (12.07.2005)

Applicant's or agent's file reference
LCP05633/PCT

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/KR2005/000783

International filing date (day/month/year)

18 MARCH 2005 (18.03.2005)

Priority date(day/month/year)

19 MARCH 2004 (19.03.2004)

International Patent Classification (IPC) or both national classification and IPC

IPC7 F41H 7/02

Applicant

LG CABLE LTD. et al

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/KR



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**WRITTEN OPINION OF THE
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Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

- ☐ a sequence listing
☐ table(s) related to the sequence listing

b. format of material

- ☐ in written format
☐ in computer readable form

c. time of filing/furnishing

- ☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

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PCT/KR2005/000783

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-4	YES
	Claims	NONE	NO
Inventive step (IS)	Claims	1-4	YES
	Claims	NONE	NO
Industrial applicability (IA)	Claims	1-4	YES
	Claims	NONE	NO

2. Citations and explanations :

Reference is made to the following documents from the International Search Report (ISR) :

D1: JP-A-62-289479

D2: JP-A-62-289480

D3: JP-A-07-257446

D4: JP-A-09-132183

D5: JP-A-07-117153

1) The present invention relates to a separable rubber track used in a tank, and more particularly to a separable rubber track of a tank in which when a part of rubber molding is damaged during traveling, only the damaged part can be replaced.

2) Documents D1 to D5 disclose a connection link type rubber crawler and/or a method of connecting and repairing it.

3) More specifically, document D1(or D2) specifies a rubber crawler, wherein multiple reinforcing steel wires are buried in the width direction of a rubber endless belt-shaped body and many core metals serving as coupling members of drive rollers are arranged in the longitudinal direction. In this case, the crawler is divided at multiple positions in the longitudinal direction and connecting fittings are fitted on both ends of steel wire portions of split crawlers respectively. Document D3 describes a rubber crawler having a plurality of core metals buried with a fixed space relating to a rubber crawler main unit, and a reinforced layer buried in a lower part total unit of a blade part. Document D4 depicts a rubber crawler having a core embedded in the rubber crawler, a lug protrudingly formed on the ground side, a track link bolted to a bolt hole and joined with a link pin, and joining pieces embedded to protrude superimposed parts on the outer periphery side of a core wing part. Document D5 discloses production of a mold repairing a rubber crawler cut.

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International application No.

PCT/KR2005/000783

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of :

4) For the analysis of the novelty and the inventive step, although documents D1(or D2) is considered to represent the most relevant state of the art, the document D1(or D2) does not teach a separable rubber track divided into a plurality of track units, disclosed in claim 1 of the present application, wherein each track unit comprises a pair of connection cores connected to the steel cores and provided on both ends of the track unit and coupling members rotatably coupled with the connection cores such that the track units are connected to each other by coupling members to form an integrated endless track.

5) As mentioned above, the documents D1 to D5 do not individually disclose all of the features of claim 1. Accordingly, the subject matter of independent claim 1 of the present application seems to be novel (PCT Article 33(2)).

6) More specifically, none of the documents D1 to D5 teaches or fairly suggests a separable rubber track wherein, a plurality of track units are connected to each other through coupling members rotatably combined with connection cores such that a part of rubber molding damaged can be replaced easily during operation. Accordingly, it is not considered to be obvious to a person skilled in the art to apply the knowledge of these documents individually or in combination in order to create the separable rubber track according to the invention claimed in claim 1. Therefore, the above claim 1 appears to involve an inventive step in the sense of PCT Article 33(3) as well.

7) Further, none of the documents D1 to D5 teaches or fairly suggests any of the other alternatively claimed embodiments. Therefore claims 2-4 meet the requirements of PCT Article 33(2) and 33(3).

8) Claims 1-4, relating to a separable rubber track, are considered to be industrially applicable (PCT Article 33(4)).